

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/017920 A3

(51) International Patent Classification⁷: **G21C 13/024**,
5/10, B65D 90/12

Alfried [ZA/ZA]; 34 Karee Street, Amandasig Ext. 2, 0118
KARENPARK (ZA).

(21) International Application Number:
PCT/IB2004/001738

(74) Agent: **MACKENZIE**, Colin; Adams & Adams, Adams
& Adams Place, 1140 Prospect Street, Hatfield, PO Box
1014, 0001 Pretoria (ZA).

(22) International Filing Date: 27 May 2004 (27.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003/6376 15 August 2003 (15.08.2003) ZA

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicant (*for all designated States except US*): **PEBBLE
BED MODULAR REACTOR (PROPRIETARY) LIM-
ITED** [ZA/ZA]; 3rd Floor, Lake Buena Vista Building,
1267 Gordon Hood Avenue, 0046 CENTURION (ZA).

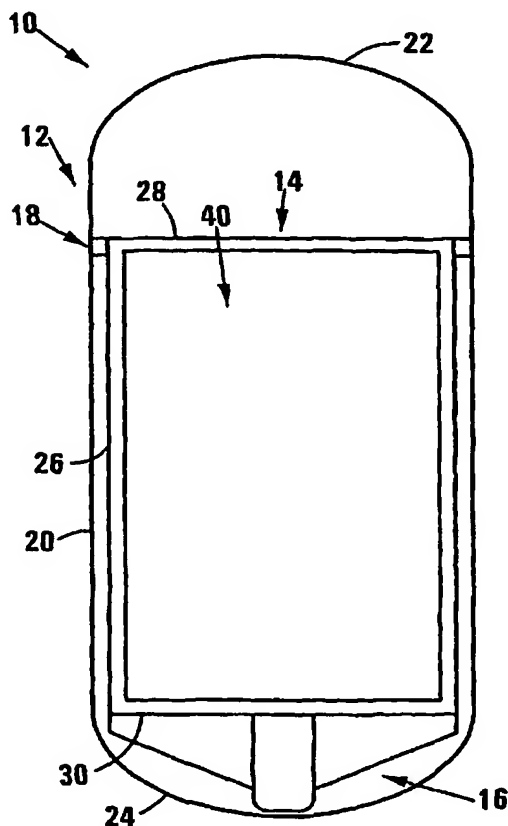
(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **FORTIER**, Fredrik,

[Continued on next page]

(54) Title: A SUPPORT ARRANGEMENT



(57) Abstract: A nuclear reactor includes a reactor pressure ves-
sel (12) and a core barrel (14), contained within the reactor pressure
vessel (12). The reactor (10) further includes a single vertical sup-
port (16), for transmitting vertical load from the core barrel to the
reactor pressure vessel. Further, lateral support means is provided
at an elevation which is above that of the support (16) to provide
lateral support to the core barrel (14). This arrangement will result
in reduced stress arising from the temperature fluctuations.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
6 May 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments